

Pittsburg County, Oklahoma
COUNTY PURCHASING OFFICE
 Pittsburg County Court House
 McAlester, Oklahoma
 Phone: (918) 423-4934

INVITATION TO BID

PLEASE REVIEW TERMS AND CONDITIONS ON REVERSE SIDE RELATING TO SUBMISSION OF THIS BID.

Notarized Affidavit completions and signature required on reverse side.

DATE ISSUED	17-Jul-23
PAGE 1 OF _____	

BID NUMBER BID # 3	BID CLOSING DATE AND HOUR July 28th, 2023 @ 4:00 PM	REQUIRED DELIVERY DATE <small>Days after award of Purchase Order</small>
------------------------------	---	---

TERMS:	DATE OF DELIVERY:
--------	-------------------

Item	Quantity	Unit of issue	DESCRIPTION	Unit Price	Total
			<p>Board of County Commissioners, Pittsburg County, wish to advertise for the following for Elm Point Fire Department:</p> <p>One (1) Ford F550 Quick Attack, or equivalent Wildlands Fire Fighting Apparatus</p> <p>SEE SPECIFICATIONS ATTACHED</p> <p><u>IF BID IS NOT RETURNED IN THE ENCLOSED ENVELOPE OR IS PLACED IN A FEDEX, UPS OR USPS SHIPPING ENVELOPE, PLEASE MARK ON THE OUTSIDE OF THE ENVELOPE "SEALED BID" & BID NUMBER</u></p>		

TERMS AND CONDITIONS

1. Sealed bids will be opened in the Commissioner's Conference Room, Pittsburg County Courthouse, McAlester, Oklahoma, at the time and date shown on the invitation to bid form.
2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) with bid number and closing date written on the outside of the envelope.
3. Unit prices will be guaranteed correct by the bidder.
4. Firm prices will be F.O.B. destination.
5. Purchases by Pittsburg County, Oklahoma, are not subject to state or federal taxes.
6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
8. Bids will be firm until delivered.

(DATE)

6.1291E+19

AFFIDAVIT: I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any state official or employee as to quantity; quality or price in the prospective contract or any other terms of said prospective contract; or in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

Subscribed and sworn before this _____ day
of _____ 20_____ (seal)

Firm: _____

My commission expires _____ Signed by: _____ Title: _____
(MANUAL SIGNATURE OF UNDERSIGNED)

NOTARY PUBLIC (CLERK OR JUDGE) Address: _____ Phone: _____
City: _____ State _____
Zip _____

NOTE: Other terms and conditions can be added at the discretion of the county officers.

RESOLUTION
24-015
To Advertise

The Board of County Commissioners, Pittsburg County, met in regular session on Monday, July 17, 2023.

WHEREAS, the Board of County Commissioners, Pittsburg County, wish to advertise for the following for Elm Point Fire Department:

One (1) Ford F550 Quick Attack, or equivalent
Wildlands Fire Fighting Apparatus

A bid package containing complete specifications and an "Invitation to Bid" are available at the Pittsburg County Clerk's Office, 115 E. Carl Albert Pkwy, Room 103, McAlester, Oklahoma 74501 or online at pittsburg.okcounties.org

THEREFORE, each competitive bid submitted to the County must be accompanied with an affidavit for filing with the competitive bid form, as required by Oklahoma Statute, Title 19 O.S. § 1501.

Sealed bids will be received and filed with the Pittsburg County Clerk until Friday, July 28, 2023 at 4:00 p.m. All bids received after 4:00 p.m. on Friday, July 28, 2023 WILL NOT BE OPENED. Bids will be opened on Monday, July 31, 2023 at 10:00 a.m. in the Board of County Commissioners Conference Room, 115 E. Carl Albert Pkwy, McAlester, Oklahoma. The Board of County Commissioners, Pittsburg County, reserves the right to reject any and all bids and re-advertise.

BOARD OF COUNTY COMMISSIONERS
PITTSBURG COUNTY, OKLAHOMA

ATTEST:



CHAIRMAN

[Signature]

VICE-CHAIRMAN

[Signature]

MEMBER

[Signature]

COUNTY CLERK

[Signature]

RESOLUTION

24-015

To Advertise

The Board of County Commissioners, Pittsburg County, met in regular session on Monday, July 17, 2023.

WHEREAS, the Board of County Commissioners, Pittsburg County, wish to advertise for the following for Elm Point Fire Department:

One (1) Ford F550 Quick Attack, or equivalent
Wildlands Fire Fighting Apparatus

A bid package containing complete specifications and an "Invitation to Bid" are available at the Pittsburg County Clerk's Office, 115 E. Carl Albert Pkwy, Room 103, McAlester, Oklahoma 74501 or online at pittsburg.okcounties.org

THEREFORE, each competitive bid submitted to the County must be accompanied with an affidavit for filing with the competitive bid form, as required by Oklahoma Statute, Title 19 O.S. § 1501.

Sealed bids will be received and filed with the Pittsburg County Clerk until Friday, July 28, 2023 at 4:00 p.m. All bids received after 4:00 p.m. on Friday, July 28, 2023 WILL NOT BE OPENED. Bids will be opened on Monday, July 31, 2023 at 10:00 a.m. in the Board of County Commissioners Conference Room, 115 E. Carl Albert Pkwy, McAlester, Oklahoma. The Board of County Commissioners, Pittsburg County, reserves the right to reject any and all bids and re-advertise.

BOARD OF COUNTY COMMISSIONERS
PITTSBURG COUNTY, OKLAHOMA

ATTEST:



CHAIRMAN



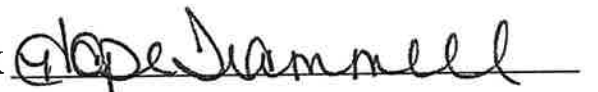
VICE-CHAIRMAN



MEMBER



COUNTY CLERK



SPECIFICATIONS
FOR
ELM POINT
FIRE DEPARTMENT
FOR A

FORD F550 Quick Attack
or equivalent

Wildlands Fire Fighting Apparatus

Minimum Specifications for a Wildlands Fire Fighting Apparatus
(Any Mention of a specific brand name – shall be or equivalent)

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
Intent of Specifications:.....	1
Service and Warranty Support:	1
Service Certification:.....	2
Brand Names:.....	2
Oklahoma Motor Vehicle License:	2
Proposal Price:.....	2
Proposal Format:	2
Exceptions:	3
Delivery:.....	3
Cab & Chassis:	3
Cab Console:	4
Full Bumper Replacement:.....	4
Winch System:.....	4
Side Step Bars:	5
Mud Flaps:.....	5
Chassis Fuel Fill:.....	5
Wheel Simulators:	5
Body:	5
Ladder:.....	5
Headache Rack:	6
Rear Apron:	6
Compartmentation:	6
L1 Compartment:.....	6
L2 Compartment:.....	6
R1 Compartment:	7
R2 Compartment:	7
B1 Compartment:	7
Hose Storage Compartments:	8
Skid Unit.....	8
Polypropylene Water Tank:.....	8
Sight Glass Illumination:.....	9
Polypropylene Foam Tank:	9
Fire Pump Plumbing System:.....	9
Hose Threads:.....	9
Intake and Discharge Valves:	9
Hose Reel Discharge:	9
Bumper Discharge:.....	9
Spare Discharge:.....	10
Fire Pump to Water Tank bypass Line:.....	10
Water Tank to Pump & Suction:	10
Manifold:	10
Fire Pump:	10
Performance.....	10
Pump.....	10
Priming	11
Suction/Discharge.....	11
Engine.....	11

Foam Pump:.....	11
Fuel Tank:.....	11
Battery Supply:.....	11
Pump Test:.....	12
Tank Level Gauge(s):.....	12
Water Gauge:.....	12
Foam Gauge:.....	12
Pump Panel:.....	12
Akron Bumper Monitor:.....	12
Booster Hose Reel:.....	13
Hose Reel Electric Rewind:.....	13
Hose:.....	13
Booster Hose:.....	13
Nozzles:.....	13
Nozzle Clip:.....	14
Electrical System:.....	14
Master Disconnect Switch:.....	15
Light Bar:.....	15
Features:.....	15
Lower Warning Lights:.....	15
Features:.....	16
Compartment Lights:.....	16
Door Ajar:.....	16
Electronic Siren:.....	16
Features:.....	16
Speaker:.....	16
Features:.....	16
D.O.T Lighting:.....	16
Clearance:.....	16
Signal, Brake and Reverse:.....	17
Flood Light:.....	17
Backup Alarm:.....	17
Auto Charge:.....	17
Battery Saver:.....	17
Remote Battery Charge Condition:.....	18
Auto Eject Receptacle:.....	18
Scene Light:.....	18
Features:.....	18
Radio:.....	18
Antenna:.....	18
Labels:.....	18
Scotchlite Striping & Lettering:.....	19
Cab and Body:.....	19
Lettering:.....	19
Rear Body:.....	19
Apparatus Paint:.....	19
Cab and Chassis.....	19
Apparatus Body.....	19
Warranty:.....	19
1 Year Standard Warranty:.....	19
2 Year Pump Warranty:.....	19

10 Year 100,000 Mile Structural Warranty:.....	20
10 Year Stainless Steel Plumbing Warranty:	20
3 Year Graphics Warranty:.....	20
5 Year Electrical Warranty:.....	20
Lifetime Polypropylene Tank Warranty:.....	20

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

Intent of Specifications:

It is the intent of these specifications to clearly describe the furnishing and delivery to the Purchaser, a complete apparatus equipped as specified. The primary objective of these specifications is to obtain the most acceptable apparatus for service in the Fire Department. These specifications cover specific requirements as to the type of construction and tests the apparatus must conform, together with certain details as to finish, material preferences, equipment and appliances with which the successful bidder must conform.

The design of the apparatus must embody the latest approved automotive design practices. The workmanship must be of the highest quality in its respective field. Special consideration shall be given to service access to areas needing periodic maintenance, ease of operation, and symmetrical proportions. Construction must be heavy-duty and ample safety factors must be provided to carry loads as specified. The construction method employed will be in such a manner as to allow ready removal of any component for service or repair.

The apparatus shall conform to the National Fire Protection Association Standard for Automotive Fire Apparatus, number 1901 and the National Fire Protection Association Standard for Wildland Fire Apparatus, number 1906, in its most recent edition, unless otherwise specified in this document. Only the specified firefighting support equipment listed in these specifications shall be provided.

The apparatus shall further conform to all Federal Motor Vehicle Safety Standards. **NO EXCEPTION.**

Each bidder shall furnish satisfactory evidence of their ability to design, engineer, and construct the apparatus specified and shall state the location of the factory producing the apparatus. They shall also substantiate they are in a position to render prompt and proper service and to furnish replacement parts for the apparatus.

Bids will be addressed and submitted in accordance with the instructions provided on the cover sheet. The bid number, the date, and bid opening time shall be stated on the front of the bid envelope.

It shall be the responsibility of the bidder to assure that their proposal arrives at the location and time indicated. Late proposals, telegrams, facsimile, or telephone bids will not be considered. **NO EXCEPTION.**

All bidders are required to detail the payment terms for apparatus on the bidder's proposal page. Any required prepayments or progress payments must be explained in detail.

Service and Warranty Support:

To insure full service after delivery, the bidder must be capable of providing service when required. The bidder shall show that the company is in position to render prompt service and furnish replacement parts. Each bidder must be able to display that they are actively in the fire apparatus service business by operating an authorized service center located within the State of Oklahoma, and shall stock parts equating to \$250,000.00, No Exceptions.

Detailed information shall be provided on service facilities, personnel, service vehicles, and how long the service facility has operated in the State of Oklahoma.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

Service is a criteria for award of this bid.

Service Certification:

Each bidder shall supply with their bid an Emergency Vehicle Technician certification, and photos of the full service repair facility that is located within the State of Oklahoma, these documents must be provided with the proposal. No Exceptions.

Brand Names:

Any brand names, trade names, manufacturer's names, or other product identification names included in these specifications are included to establish a minimum quality and standard. These products listed in our specifications which have name brands attached in no manner limit any bidder, however the items included in your bid must meet or exceed our minimum specifications. The Fire Departments will make the sole determination as to which items meet or exceed the specifications.

Oklahoma Motor Vehicle License:

Each manufacturer, dealer, and sales person must furnish a copy of their Oklahoma Motor Vehicle Commission License.

This is an Oklahoma Law and must be furnished, No Exceptions.

Proposal Price:

Each bidder's proposal must include all items required in the specifications unless a specific exception is taken. Any bidder who option prices an item included in these specifications that does not specifically require option pricing will have their proposal rejected without further cause.

Proposal Format:

Each bid must be accompanied by a set of detailed contractor's specifications consisting of a detailed description of the apparatus and equipment proposed. All bid proposal specifications must be in the same sequence as the advertised specification for ease of comparison. These specifications shall include size, location, type, and model of all component parts being furnished. Detailed information shall be provided on the materials used to construct all facets of the apparatus body. Any bidder who fails to submit detailed construction specifications, or who photo copies and submits these specifications as their own construction details or any proposals found to have deviations without listing them will be considered non-responsive and shall render their proposal ineligible for award, **NO EXCEPTION.**

Exceptions:

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

The following apparatus specifications are considered minimum design and construction standards against which the apparatus will be inspected. It is the intent to receive proposals on equipment/apparatus meeting the attached detailed specifications in their entirety. Any proposals being submitted, without "Full Compliance" with these specifications shall so state on the bid proposal page, followed by a detailed "Letter of Exceptions" listing the areas of non-compliance. The reference must include page number, paragraph, and the exact nature of the exception.

Failure to follow this format, provided for the convenience of the Purchaser, will render the vendor's proposal non-responsive and ineligible for award of contract.

If a product brand name is specified and is commercially available to all bidders, an exception to such items is not acceptable and such bid may be rejected. All deviations, no matter how slight, shall be clearly explained on a separate sheet, in the bid sequence, citing the page and paragraph number(s) of the specifications, how the proposal deviation is different, how the deviation meets or exceeds the specifications and why it is necessary.

The Purchaser may add the statement "No Exception" to a component or design feature in these specifications. In the interest of fleet conformity or specific performance requirements, the Purchaser will not permit exceptions taken to these item(s). The Purchaser reserves the right to reject any or all bid proposals and purchase the equipment it deems most suitable to its needs.

The Purchaser does not, in any way, obligate itself to accept the lowest or any bid. Any bidder taking total exception to the complete specification or a major element will result in immediate rejection of the proposal.

Delivery:

The bidder shall state the time required for delivery of the completed unit on the proposal page. The completed unit shall be delivered to the purchaser with full instructions provided to Fire Department personnel on operation, care and maintenance of apparatus at the purchaser's location.

Cab & Chassis:

The chassis shall be a 2023 F550 4x4 extended cab chassis with XL trim with the following options: *or equivalent*

Specs:

- GVWR: 19,500 lbs.
- 4.88 Ratio Limited Slip Axle
- Extra Heavy Service Suspension Package
- Rear and Front stabilizer bar

Power Train:

- 6.7L V8 Diesel Engine
- 6-Speed Automatic Transmission
- Heavy Duty Alternator

Interior Requirements:

- Vinyl 40/20/40 Split front bench seat
- Vinyl 60/40 Flip-up/fold-down bench seat

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

- XL Trim
- Power Windows
- Power Door locks
- Air Conditioning
- AM/FM Stereo/ Clock

Exterior Requirements:

- Two (2) front tow hooks
- 40-Gallon Fuel Capacity
- Roof Clearance lights
- Windshield Wipers – Interval

Safety & Security:

- Airbag – Driver and front passenger
- Belt-Minder safety belt reminder

Cab Console:

An electrical console and enclosure shall be provided to house cab mounted electrical switching devices and equipment.

The console shall be located between the driver's and the officer's seating up to the OEM dash.

There shall be sufficient space available to house siren control and department's radio.

The center seat will need to be removed.

A custom joystick mount shall be made to house the monitor joystick. Mounting location will be decided at pre-build.

Console shall be supplied with Two (2) USB and two (2) 12V power outlets.

Full Bumper Replacement:

A full front bumper replacement shall be supplied. The front bumper shall be manufactured with 1 ¼" square tubing with the 90 degree corners on the square tubing to give the grille guard unmatched strength & durability. The body of the front bumper shall be constructed from 1/8" black gloss tread plate and shall mount to the apparatus frame using a combination 3/8" and ½" steel plate.

The front bumper shall have an integrated speaker mount, winch and monitor deck.

Winch System:

A WARN 16.5ti Self-recovery 16,500lb winch shall be supplied. The winch shall have a minimum 90 ft. of 7/16" diameter steel wire rope with a 315:1 gear ratio. *or equivalent*

The winch shall be mounted in the front replacement bumper.

Side Step Bars:

A set of black side step bars shall be provided and mounted below each cab door. These steps bars shall have a non-slip step pad surface.

Mud Flaps:

Mud flaps shall be provided behind each rear wheel.

Chassis Fuel Fill:

There shall be a fuel fill provided in a recessed area on the rear of the truck.

Wheel Simulators:

A set of stainless steel wheel simulators shall be provided and installed.

Body:

The fire body shall be constructed entirely of heavy duty extruded aluminum, designed to fit a Ford F-550 chassis, 60CA, Diesel. *or equivalent*

The fire body dimensions shall be 119"L x 96"W.

The perimeter of the fire body shall be constructed of a custom heavy duty 5.0" x 3.0" 6061-T6 aluminum extrusion.

The fire body cross members shall be constructed of heavy duty 3.0" 6061-T6 National Standard extruded aluminum channel.

The extruded aluminum cross members shall be located on 12" centers.

The fire body mounting sills shall be constructed of heavy duty 6.0" 6061-T6 National Standard extruded aluminum channel.

There shall be .125" aluminum diamond plate covering the entire deck of the fire body.

The .125" aluminum diamond plate deck shall be stitch welded to the bottom side of the perimeter extrusions.

Ladder:

There shall be a ladder step at each front corner of the fire body.

There shall be grab handles, one each side, on the headache rack to assist in using the ladder.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

Step wells shall have one (1) LED light to illuminate the step in the manwell connected to the chassis DOT lighting system.

Headache Rack:

There shall be a headache rack located at the front of the fire body.

The headache rack shall be constructed of heavy duty 3.0" x 2.0" 6061-T6 extruded aluminum tube.

The headache rack shall have .125" aluminum diamond plate covering the bottom half on the front side and expanded aluminum across the full top half.

There shall be an approximate 60"W x 10"D aluminum plate light bar mounting platform located on top of the fire body headache rack.

Rear Apron:

There shall be a 95"W x 12.0"D x .1875 smooth aluminum apron provided at the rear of the fire body.

There shall be a 2.0" receiver tube provided at the rear of the apparatus, attached directly below the fire body rear skirt.

The receiver tube shall be integrated into the fire body mounting sills and chassis' frame rails.

There shall be two (2) ¾" plate steel tow eyes protruding through the rear apron.

There shall be two (2) pull out drop down steps provided at the rear of the body, one each side of the receiver tube.

Compartmentation:

L1 Compartment:

There shall be one (1) compartment with ROM brand roll up doors provided on the driver side deck of the fire body.

The body of the compartment shall be constructed of .125" aluminum diamond plate.

Dimensions of the compartment shall be 42"L x 32"H x 20"D.

This compartment shall have black turtle tile on the floor.

L2 Compartment:

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

There shall be one (1) compartment with ROM brand roll up doors provided on the driver side deck of the fire body, behind the L1 compartment.

The body of the compartment shall be constructed of .125" aluminum diamond plate.

Dimensions of the compartment shall be 42"L x 32"H x 20"D.

This compartment shall have black turtle tile on the floor.

R1 Compartment:

There shall be one (1) compartment with ROM brand roll up doors provided on the driver side deck of the fire body.

The body of the compartment shall be constructed of .125" aluminum diamond plate.

The compartment shall have an adjustable shelf.

Dimensions of the compartment shall be 42"L x 32"H x 20"D.

This compartment shall have black turtle tile on the floor and on the adjustable shelf.

R2 Compartment:

There shall be one (1) compartment with ROM brand roll up doors provided on the driver side deck of the fire body, behind the R1 compartment.

The body of the compartment shall be constructed of .125" aluminum diamond plate.

The compartment shall have an adjustable shelf.

Dimensions of the compartment shall be 42"L x 32"H x 20"D.

This compartment shall have black turtle tile on the floor and on the adjustable shelf.

B1 Compartment:

There shall be a 72"D x 30"W x 5.0"H long tool storage compartment provided.

The compartment shall be located between the fire body mounting sills, with the door opening facing the rear of the apparatus.

The compartment door shall be constructed of .125" aluminum diamond plate and shall be horizontally hinged.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

Hose Storage Compartments:

There shall be two (2) hose storage compartments installed, one each side, under the bed at the rear angled down, diamond plate with drop down door.

These trays shall be constructed of .125 aluminum diamond plate and measure 20"W x 5"H x 18"D.

There shall be holes in the floor of the hose storage compartment to allow for drainage.

Skid Unit

The water tank, pump and plumbing shall be mounted on a heavy duty polypropylene frame to allow for the unit to be removed as a single unit.

The skid unit shall be bolt directly through the bed to the apparatus frame utilizing four (4) heavy duty grade 8 bolts.

Polypropylene Water Tank:

A 400 gallon water tank shall be supplied and shall have a 4" overflow. The construction shall be of co-polymer polypropylene and shall be rectangular shaped. **No Fiberglass! No Exception!**

The tank body and end bulkheads shall be constructed of 0.5" thick, polypropylene tested inside and out.

The transverse and longitudinal swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments. The 0.5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during filling operations. Drilled pegs for lifting eyes shall be provided in the top area of the water tank.

The water fill tower shall be 0.5" thick polypropylene stock with a hinged lid and a removable polypropylene screen.

The water fill tower shall be located on the rear passenger's side of the water tank. A sight glass shall be supplied on the rear right corner of the water tank, so the operator can see the lifeline of water remaining during pumping operations from the rear.

Two (2) tank mounting tabs shall be provided. One shall be at the front and one at the rear to allow the tank to be fastened to the fire body.

The water tank shall have an over flow tube. The overflow tube shall exit below the body, ahead of the rear wheels.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

Sight Glass Illumination:

An LED light shall be supplied to illuminate the sight glass to see the water level during nighttime operations.

Polypropylene Foam Tank:

A 12-gallon internal polypropylene foam tank shall be supplied as an integral part of the main water tank. The construction methods of the foam tank shall be identical to that of the water tank. The foam tank shall have a sight glass for the ease of seeing remaining foam capacity. The foam fill tower shall be 1/2" thick polypropylene stock with a hinged lid and a removable polypropylene screen.

Foam fill tower shall be located on the driver's side rear of the water tank.

Fire Pump Plumbing System:

The engine driven fire pump plumbing system shall be built completely of stainless steel piping, stainless steel and/or brass fittings, and connections.

Tank connections, front discharges, and other piping shall use high-pressure flexible piping. Flexible hose couplings shall be threaded stainless steel or Victraulic connections.

Plumbing shall not be welded for ease of disassembly, no exceptions.

Hose Threads:

The hose threads shall be National Standard (NST) on all base threads on the apparatus intakes and discharges, unless otherwise specified.

Intake and Discharge Valves:

All valves used in the plumbing installation shall be Akron Brass TS full flow type valves.

Steel – Industrial valves shall not be used due to rusting.

Hose Reel Discharge:

Two (2) 1" discharges shall be provided and piped one (1) to each hose reel with flexible high pressure hose and a 1" Akron Brass Short TS handle full flow type valve or equivalent will be provided for this connection on manifold.

Bumper Discharge:

One (1) 1.5" Akron Brass Short TS handle full flow type valve shall be provided and plumbed to the front bumper monitor. *or equivalent*

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

Spare Discharge:

One (1) 1.5" Akron Brass Short TS handle full flow type valve shall be provided and plumbed to the rear with a chrome cap and chain. *or equivalent.*

Fire Pump to Water Tank bypass Line:

A 1" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be an Akron Brass Short TS handle full flow type valve. *or equivalent.*

A 1" piping and flex hose will be provided from valve to tank. The valve control shall be directly on the valve.

Water Tank to Pump & Suction:

A 2½" water tank to fire pump line shall be provided with an Akron Brass quarter turn full flow type valve with R1 handle. This connection shall have a push/pull T-handle assembly mounted near the valve at the back of the skid. *or equivalent.*

Suction will be provided with a full flow 2½" Akron Brass long TS handle full flow type valve so that while pumping you can also be connecting to an additional water source. *or equivalent.*

A 2½" chrome plug and chain will be provided at the rear for the suction.

Manifold:

A custom 304 stainless steel manifold will be provided for all discharges.

Fire Pump:

A Hale HPX200-B23 pump shall be supplied and mounted to the rear of the skid unit. *or equivalent*

Performance

The pump/engine shall be capable of meeting the NFPA 1906 performance rating of 50 GPM @ 150 PSI and 150 GPM @ 100 PSI. Typical pump performance from 5 foot draft at sea level shall be: 90 GPM @ 150 PSI, 170 GPM @ 100 PSI and 250 GPM @ 30 PSI.

Pump

The pump body shall be made of anodized alloy aluminum castings coupled together with a stainless steel band clamp with an O-ring seal which allows quick pump volute removal for servicing. The pump end shall be factory hydrostatically tested to 300 PSI. The impeller shall be bronze. The renewable clearance rings shall be made of bronze to inhibit galvanic corrosion. The impeller shall be 8.75 inches (222.3 mm) in diameter and designed with a sleeve back end to prevent water from coming in contact with the engine shaft. The pump shaft seal shall be an

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

automatically adjusting, maintenance free, mechanical type. The pump body shall be equipped with a petcock drain valve.

Priming

The pump shall be equipped with an exhaust venturi primer of brass and stainless steel construction. The primer shall be capable of priming at 13 feet lift. The primer shall be actuated with a spring return, single control lever located at the operator's panel. The primer to pump line shall be equipped with an automatic check valve for priming from an open body of water and a manual shut -off for pumping from a pressurized water source.

Suction/Discharge

The suction and discharge ports shall be female pipe thread, designed and located to accept applicable hose thread adapters (3" NPT / 4" Victaulic Suction, 2.5" NPT Discharge flange).

Engine

The engine shall be a 4 cycle gasoline Briggs and Stratton Vanguard 386447 series V-Twin, overhead valve, air cooled design. Engine rating shall be 23 BHP at 3600 RPM. Engine displacement shall be 627cc and shall be designed to meet current CARB (California Air Resources Board) and EPA (Environmental Protection Agency) standards. A 12-volt electric system shall be provided with electric starter and a 16 amp alternator. Engine shall be equipped with a residential muffler with USDA approved spark arrestor. *or equivalent.*

Foam Pump:

A Blizzard Wizard class *A* foam system with a main water check valve that is capable of providing foam to all discharge outlets shall be provided. *or equivalent.*

The foam system shall be installed in such a manner that the system, discharges, and hoses can be flushed without foam entering the water tank from the foam system.

Foam system will have a manual metering valve at the rear of the skid unit to set the percentage of foam out of the discharges.

A booster pump will be provided at the rear for foam system so foam is available in a moment's notice.

Fuel Tank:

A heavy duty aluminum 6 gallon fuel tank shall be supplied and mounted to the skid unit frame. The fuel tank shall have fuel level sight gauge and an over flow tube.

Battery Supply:

The skid unit of the apparatus shall have a heavy duty separate battery supply to power the unit.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

The engine will include a 36 watt alternator to keep separate battery charged.

Pump Test:

The fire pump shall be tested after all of its associated piping and valves have been installed on the apparatus. The tests shall be conducted at the manufacturer's facility and certified by the manufacturer.

Tank Level Gauge(s):

Water Gauge:

A lighted LED water tank level gauge will be provided on the pump panel for view of lifeline of water during nighttime operations.

A mini lighted tank level gauge will be provided inside cab, so operator is able to view tank water levels from the safety of the cab.

Foam Gauge:

A lighted LED water tank level gauge will be provided on the pump panel for view of lifeline of water during nighttime operations.

A mini lighted tank level gauge will be provided inside cab, so operator is able to view tank water levels from the safety of the cab.

Pump Panel:

A standard pump panel shall be supplied and located at the rear of the apparatus. The pump panel shall be installed on a tilted pump panel for the ease of visibility.

Pump Panel shall have the following controls:

- Pump Panel Light switch
- Start/Stop switch
- Low oil pressure light
- Pump inlet/outlet pressure gauge
- Idle control
- Choke
- Foam Controls

Akron Bumper Monitor:

The adjustable 30, 60, 90 or 125 GPM rated monitor is to be an all-electric single waterway monitor constructed of lightweight Pyrolite. The monitor shall have cast-in turning vanes in each elbow. *or equivalent.*

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

The monitor shall have fully enclosed motors and gears with manual overrides for both horizontal and vertical rotation and may be operated simultaneously. The monitor is not to exceed 13 3/16" high and 11 9/16" wide. The vertical travel shall be from 45° below to 90° above horizontal with adjustable stops at -20° and +45°. The horizontal rotation shall be 320° with adjustable stops at 90°.

The control system electronics shall be integrated with the monitor wiring harness. The control system shall use sealed, locking connectors for the monitor and nozzle motors. Two additional sealed, locking connectors shall be supplied for input power/electric valve control and J1939 CAN bus interface. A sealed USB connector shall be provided for updating control system firmware.

All electrical connectors shall be minimum IP65 rated. The operator interface shall consist of a CAN bus compatible joystick which will provide up, down, right, left, fog, and stream control of the monitor.

The joystick shall have a trigger switch to control an optional electric discharge valve. The monitor shall include a 5' long power/valve harness and 20' long CAN joystick harness.

Booster Hose Reel:

Two (2) Hannay hose reels, model F24-23-24 (1 RT & 1 LT) with electric rewind shall be provided with a single roller and spool assembly and a brake to adjust tension on the spool.
or equivalent

Hose reels shall be mounted one (1) each side of the apparatus bed, behind rear compartments under corresponding trays; facing outward to allow the hose to be pulled off of each side of the apparatus.

Hose Reel Electric Rewind:

Two (2) electric rewind push buttons will be installed. The electric rewind control shall be a weather-resistant enclosed momentary push button switch. Switch shall be installed as follows:
One (1) switch at each hose reel location.

Hose:

Booster Hose:

Two (2) sections of 150' of 3/4" 800psi booster hose shall be provided for the hose reel.

Nozzles:

Two (2) Akron ProVenger 1" select flow nozzles with pistol grip handles and bell shut off shall be supplied. *or equivalent.*

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

Nozzle Clip:

Nozzle clips shall be installed close to the hose reels to allow for storage of the hose reel nozzles.

Electrical System:

Low Voltage Electrical System Specifications

The following specifications describe the low voltage electrical system on the specified brush truck type fire apparatus. The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components.

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. All exposed wiring shall be run in a loom with a minimum 289 degree Fahrenheit rating. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.

All connections shall be crimp-type to resist moisture and foreign debris such as grease and road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.

Any electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in an electrical junction box or covered with a removable electrical panel or wire loom. The wiring shall be secured in place and protected against heat, liquid contaminants and damage.

The electrical system shall include the following:

- A) The electrical wiring shall be harnessed or be placed in a protective loom.
- B) No Holes shall be made in the roof of chassis, unless approved by end user.
- C) Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in it.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

The warning lights shall be switched in the chassis cab with labeled switching in an accessible location. All electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator and passenger.

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and call for the right of way.

Master Disconnect Switch:

A battery disconnect switch shall be located conveniently to the driver of the apparatus. The switch shall disconnect the 12 volt power supply from the battery system.

Light Bar:

A Tomar Scorpion 53" Red/White/Red LED low profile light bar shall be supplied. The light bar shall have clear lenses to the front and to the rear and will be mounted on the headache rack mounting platform.

Features:

- NFPA 1901 Compliant
- Variety of selectable flash patterns
- Hermetically sealed

Lower Warning Lights:

Ten (10) Tomar RECT 14s LED Warning lights shall be provided. These warning lights have four (4) high powered LED lights and shall be ultra-low profile. *or equivalent.*

Warning Lights shall be installed as follows:

- Two (2) Red LEDs on the front grille guard with one (1) each side
- Two (2) Red LEDs on apparatus chassis with one (1) each side above the front wheel well area.
- Two (2) Red on the apparatus body: with one (1) each side above the rear wheel well area.
- Four (4) Red LEDs on the rear of the apparatus with one (1) each side upper and lower.

Features:

- Four (4) Ultra-High intensity LEDs
- Multiple selectable flash patterns
- Made of optical Lexan and hermetically sealed
- Meets SAE J845, SAE J595 and CAL Title 13
- Five year manufacturer's warranty.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

Compartment Lights:

Each compartment shall be provided with two (2) LED vertically mounted lights.

The compartment lights shall be installed one (1) on each side of the compartment door opening integrated into the ROM door tracks with the light actuation with the door opening.

Door Ajar:

Each compartment light shall be controlled by a magnetic "On-Off" switch located on each compartment door.

The magnetic switch shall control a door ajar light located inside the cab.

Electronic Siren:

One (1) Carson Commander 409 full function electronic siren shall be mounted in the cab console. The siren shall have the following features: electronic air horn, wail, yelp, hi-lo, radio rebroadcast, P.A. and shall have a hard wired microphone. *or equivalent.*

Features:

- 100 Watt SAE J1849 and Class A output
- Internal programmable siren functions
- Four Position progressive slide switch
- Six backlit and rubberized relay push-button switches
- Scrolling TAP II intersection clearing feature

Speaker:

One (1) Federal Signal ES100, 100 watt speaker shall be mounted behind the front of the chassis bumper or grille. The speaker shall be wired to the electronic siren located in the cab. *or equivalent.*

Features:

- Neo-driver for increased dependability
- 100 Watt high output power
- Sound output meets SAE J1849 and Class A
- Impedance of 11 ohms

D.O.T Lighting:

The 12 volt lighting on the brush truck body shall conform to FMVSS 108 standards. All DOT lighting shall be LED type.

Clearance:

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

There shall be a minimum of five (5) red clearance lights on the rear of the truck (three (3) in the rear center and one on each outside corner of the rear apparatus bed).

One (1) red clearance lights shall be on each side rear corner and one (1) yellow clearance light on each front side corner.

Signal, Brake and Reverse:

The rear shall also contain a minimum of two (2) Stop/Turn/Tail lights and two (2) clear reverse lights. These lights shall be oval, flush mounted lights.

Flood Light:

A 46" LED flood light shall be installed on the front section of the light bar platform facing forward, adjusted as to not to interfere with the warning light bar. Switching shall be in the cab console.

Flood light shall have 18,000 lumens.

Backup Alarm:

An automatic electric 97 db back-up alarm shall be wired to activate when the transmission is placed into reverse. The alarm shall be mounted under the rear of the apparatus body.

Auto Charge:

The Auto Charge 2000 is a compact, completely automatic, dual channel battery charger designed for vehicles with two batteries. The charger is ruggedized to withstand the shock and vibration encountered by vehicle mounted equipment.

- Independent charge controls for each battery
- Electronic remote sensing of true battery voltages, eliminates the need for sensing wires
- Automatic current limiting and apportionment
- Built-in Battery Saver
- Remote dual battery charge/condition indicator
- Power "ON" LED indicator
- Battery Saver overload indicator

The charger contains two independent charge controls, one for each battery. This allows each battery to be independently charged while maintaining battery isolation. Each battery voltage is remotely sensed, electronically, eliminating the need for four sense wires. Each of the charge controls is completely automatic and stops charging the battery when it is fully charged.

Battery Saver:

A 3 ampere Battery Saver is built into the charger. When connected as shown in the installation wiring diagram, loads on battery #1 such as radios and rechargeable hand lights are automatically switched to the Battery Saver when power is applied to the charger.

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES
YES NO

The Battery Saver allows more efficient charging by removing these loads. A Battery Saver overload indicator alerts the operator that the Battery Saver load has exceeded 3 amperes.

Remote Battery Charge Condition:

This remote indicator shows the charge condition of each battery in 10 levels from "LOW CHARGE" to "FULLY CHARGED".

Auto Eject Receptacle:

An auto eject weather proof plug will be provided and placed in a position for ease of plugging in an extension cord to department specifications.

Scene Light:

AkronBrass SceneStar LED lights with side mount telescopic light shall be installed. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall extend up to 40" (as applicable) and rotate 360 degrees. A square mounting flange shall be provided. Wiring shall extend from the pole bottom with a 4 ft. retractile cord. *or equivalent*

Location: Mounted to the front of the apparatus body with one (1) each side.

Features:

- Industry leading 6 year manufacturer's warranty
- 19,000 Lumens
- LED lights with engineered reflector for optimum light output

Radio:

The customer supplied radio shall be installed in the cab console.

Antenna:

The customer supplied antenna shall be installed on the headache rack over the cab.

Labels:

Fastened labels shall be supplied and mounted in accordance to their function:

All appropriate switches inside the cab shall be properly labeled with their function.

All appropriate valves on the pump panel shall have a corresponding function label.

Scotchlite Striping & Lettering:

Cab and Body:

The apparatus cab and body shall be provided with a standard Scotchlite striping package consisting of a 1" – 3" – 1" colored stripe on the lower section of the cab doors and a 3" colored strip along the side of the apparatus body.

Lettering:

Scotchlite lettering with shading package shall consist of Department's name and unit # and departments door shield shall be installed.

Rear Body:

Chevron "A" style Scotchlite striping shall be provided on rear of body.

The colors shall be Yellow and Lime Green reflective.

Apparatus Paint:

Cab and Chassis

The apparatus cab and chassis shall be painted by the chassis manufacturer with all applicable warranties. The color of the cab shall be: Oxford White.

Apparatus Body

The apparatus body shall be made of aluminum and shall not be painted.

Warranty:

1 Year Standard Warranty:

The apparatus manufacturer shall provide a full 1-year standard warranty. All components manufactured by the apparatus manufacturer shall be covered against defects in materials or workmanship for a 1-year period. All components covered by separate suppliers such as engines, transmissions, tires, and batteries shall maintain the warranty as provided by the component supplier. A copy of the warranty document shall be provided with the proposal. No Exceptions

2 Year Pump Warranty:

Pump manufacturer shall warranty products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of two years or 2000 hours of usage, whichever comes first. Products used for rental or contracting purposes are

Any Mention of Brand Name Shall be "or Equivalent"

BIDDER
COMPLIES

YES NO

warranted for a period of six months or 2000 hours of usage, whichever comes first. This limited warranty is effective only if the equipment or apparatus is used as directed, is not subjected to misuse, negligence or accident, and is not altered, treated or repaired by someone other than pump manufacturer or its designee. A copy of the warranty document shall be provided with the proposal. No Exceptions

10 Year 100,000 Mile Structural Warranty:

The apparatus manufacturer shall provide a comprehensive 10 year/100,000 mile structural warranty. This warranty shall cover all structural components of the cab and/or body manufactured by the apparatus manufacturer against defects in materials or workmanship for 10 years or 100,000 miles, whichever occurs first. Excluded from this warranty are all hardware, mechanical items, electrical items, or paint finishes. A copy of the warranty document shall be provided with the proposal. No Exceptions

10 Year Stainless Steel Plumbing Warranty:

The apparatus manufacturer shall provide a full 10-year stainless steel plumbing components warranty. This warranty shall cover defects in materials or workmanship of apparatus manufacturer designed foam/water plumbing system stainless steel components for 10 years. A copy of the warranty document shall be provided with the proposal. No Exceptions

3 Year Graphics Warranty:

The apparatus manufacturer shall provide a full 3-Graphics warranty. This warranty shall cover defects in materials or workmanship of apparatus manufacturer's graphic components for 3 years. A copy of the warranty document shall be provided with the proposal. No Exceptions

5 Year Electrical Warranty:

The apparatus manufacturer shall provide a full 5 year-electrical warranty. This warranty shall cover defects in materials or workmanship of apparatus manufacturer's electrical components for 5 years. A copy of the warranty document shall be provided with the proposal. No Exceptions

Lifetime Polypropylene Tank Warranty:

The tank manufacturer warranties that tanks will be free from defects in materials and workmanship for a period of time equal to the service life of the original vehicle on which tank was installed. Original vehicle must be in active fire suppression for warranty to be in full effect. A copy of the warranty document shall be provided with the proposal. No Exceptions.